

Construct of Amb a1 cDNA - III

Fig. 1

Full-length Amb a1 (396 codon)



Plant Leader Sequence (36AA)

$\Delta 36$ Amb a1



ssHA $\Delta 36$ Amb a1



Virus Leader Sequence (14AA)

Comparison of codon usage (Plant vs. Human)

HIS

Plant	Human
CAT	83%
CAC	17%

GLN

Plant	Human
CAA	90%
CAG	10%

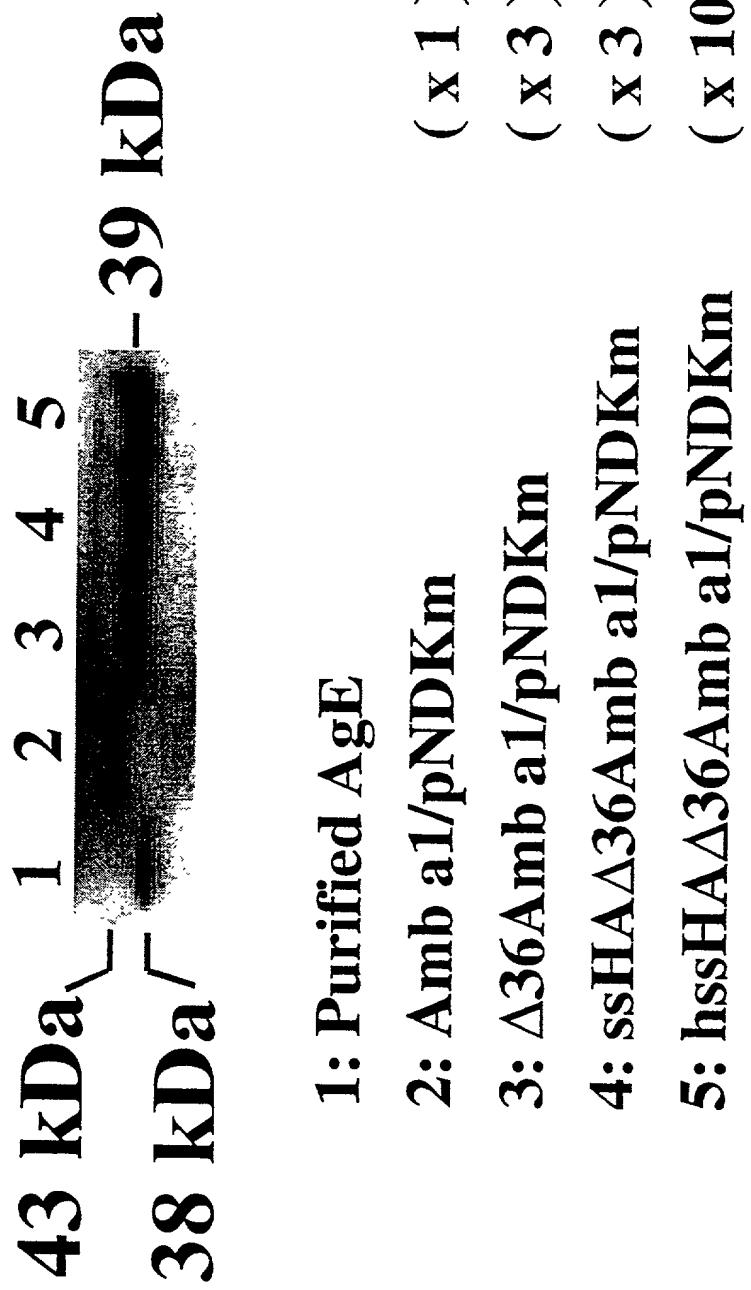
ASP

Plant	Human
GAT	76%
GAC	24%

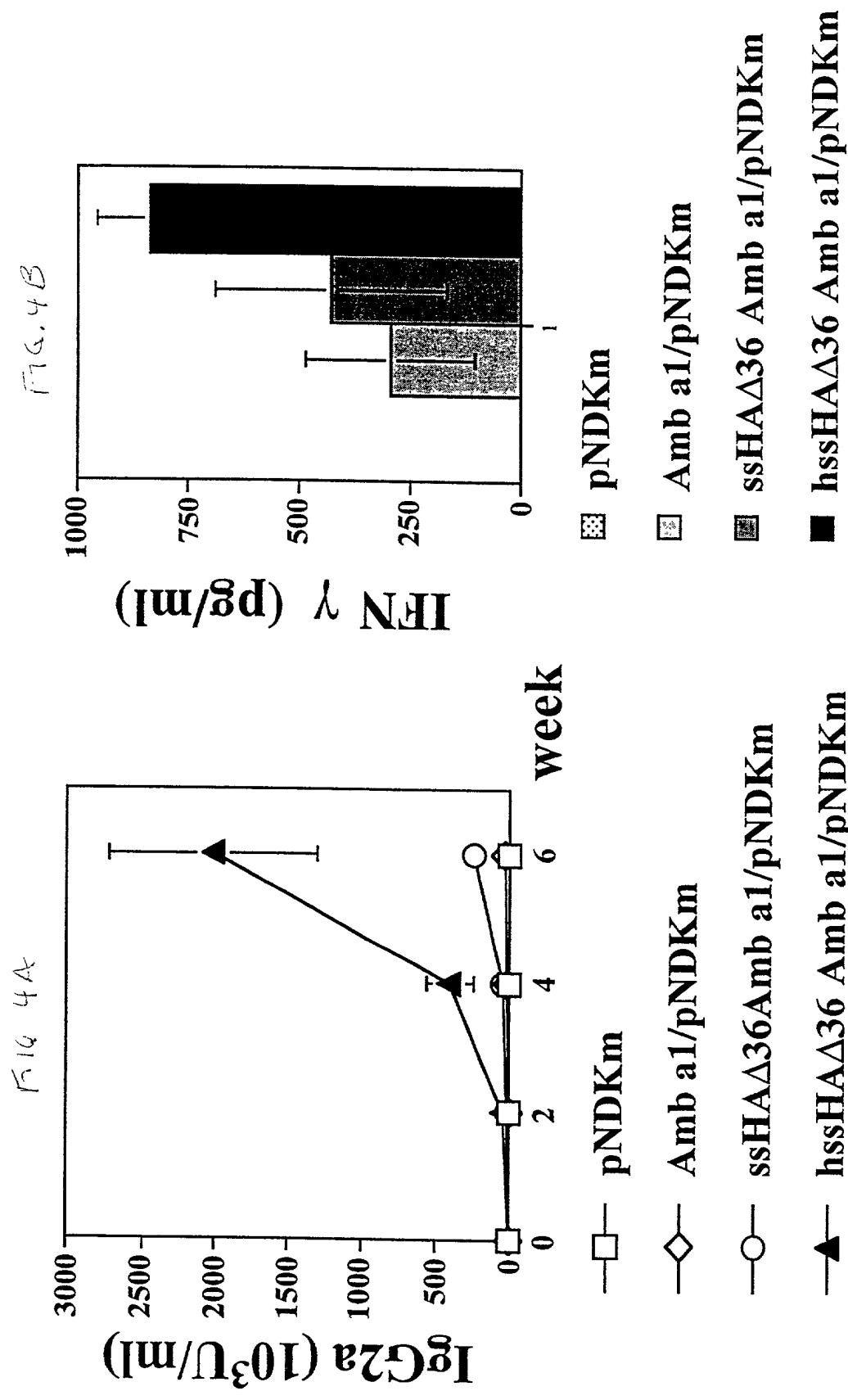
GLU

Plant	Human
GAA	69%
GAG	31%

Expression of Amb a1 in COS-7 cell - III



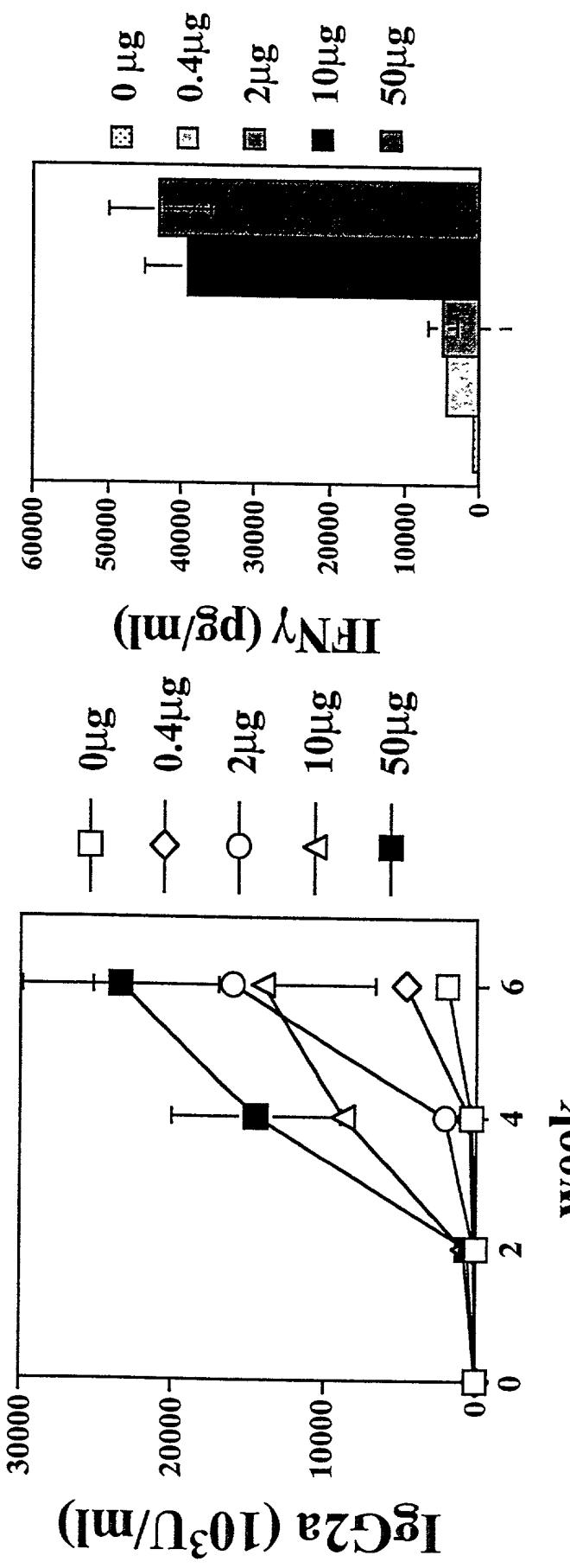
Induction of Antigen-specific Antibody and Cytokine *in vivo* - III



Induction of Antigen-specific Antibody and Cytokine *in vivo* - VI

(Co-injection of ISS-ODN with 50 μ g of hssHA Δ 36Amb a1/pNDKm)

Fig. 6B



In vivo Efficacy of ISS-ODN (dsPO vs. ssPS)

- Injection of ISS-ODN(i.v.) [200 μ g/mouse]
- Isolation of spleen after 2 hr post-injection
- Isolation of mRNA
- Detection of IL-6/IL-12 transcript by RT-PCR

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1: PBS, 2: ISS-ODN, 3: M-ODN

Reduction of Amb a1-specific IgE *in vivo* (week 8)

